

REMARKS

By the present amendment, claims 1-11 and 13-42 are pending in the application. Claims 21-42 have been withdrawn from consideration as being directed to a non-elected species of invention. Claim 1 is amended and claim 12 is canceled herein without prejudice.

Claims 1-3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Duffin (U.S. Patent No. 5,752,976). With regard to the claims as amended herein, this rejection is respectfully traversed.

Claim 1 is amended herein to recite features similar to features recited in original, dependent claim 12. Dependent claim 12 is cancelled herein, to avoid redundancy. Claim 12 was included in a rejection based on Duffin in view of Lanzl et al. (U.S. Patent No. 6,353,406). As described in more detail below, neither Duffin nor Lanzl et al. (alone or in the combination suggested by the Examiner) teaches or suggests the invention recited in the presently amended claims.

Claim 1, as amended herein, recites a medical system having a medical device MD and a communication device CD and wherein the MD's telemetry system and the CD's telemetry system are controlled to use one of a predefined plurality of preambles including a first preamble for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the communication device. None of the prior art of record (alone or in combination) describes or suggests a medical system as claimed, including a MD and CD telemetry systems controlled to employ a first preamble for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the communication device.

Duffin does not appear to describe or suggest any preambles to messages sent between a communication device and a medical device. Thus, Duffin, alone, does not disclose or suggest MD and CD telemetry systems controlled to employ a first preamble for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the communication device.

Lanzl also fails to disclose or suggest MD and CD telemetry systems controlled to employ a first preamble for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the communication device. Lanzl describes a system for tracking the location of mobile articles and personnel by associating an electronic tag with each object or person. Lanzl is concerned about tracking locations of multiple objects or personnel and is not concerned with communicating between a communication device and a medical device. Thus, Lanzl does not describe or suggest the use of a first preamble for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the communication device.

With reference to Fig. 1 of the Lanzl patent, Lanzl's system includes cell controllers 102 that send interrogation signals 106, through antennas 104 to mobile tags 101. Each tag 101 converts the incoming signal 106 to an outgoing signal 107, while modulating its UID and other data onto the outgoing signal 107. (Lanzl, col. 11, ll. 46-53.) The tag's outgoing signal 107 is transmitted to the antennas 104, so that the cell controllers 102 can calculate a distance measurement (distance from the tag to each antenna). From the distance measurements of the tag to at least three antennas, Lanzl's system can triangulate the location of the tag. Lanzl's tag distance measurement (location tracking) scheme does not employ first and second preambles, where a first preamble is used for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the communication device.

Lanzl's cell controllers 102 send an interrogation signal 106, which is at a first frequency, 2440 megahertz, while the tags transmit back a frequency-shifted signal 107 at a second frequency of 5780 megahertz. (Lanzl, col. 3, ll. 57-64.) The interrogation signal 106 is described as a frequency signal – Lanzl provides no teaching or suggestion of the signal 106 having a preamble.

Lanzl's tag converts the interrogation signal 106 into a outgoing signal 107 and modulates its outgoing signal 107 with data, the datagrams 1400 for which are shown in Fig. 12. The datagram of Lanzl's outgoing tag message includes an "identifier preamble 1402", used for a validity check, such as a cyclic redundancy check. (Lanzl, col. 12, ll. 39-41.) Lanzl discloses the

use of an “identifier preamble” before the tag UID, to enable the cell controller “to quickly verify that the tag is chirping as expected, without needing to decode the tags complete UID.”

According to Lanzl, “this frees the cell controller for other activities, such as communicating with different tags in proximity to other antennas.” (Lanzl, col. 13, lines 12-15.) The function of Lanzl’s identifier preamble is used in the context of a tracking system for tracking a large number of mobile tags in the proximity of multiple antennas 104. Lanzl’s identifier preamble does not teach or suggest communicating messages between a communication device and a medical device, where a first preamble is used for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the communication device.

Lanzl provides no teaching or suggestion of using that preamble 1402 or any other preamble for the incoming interrogation signal 106 (i.e., no teaching or suggestion of a first preamble for incoming transmissions and a second preamble for outgoing transmissions). Accordingly, not only would there would have been no reason or motivation to combine Lanzl with Duffin, but, even if combined (as suggested by the Examiner), the combination of Lanzl and Duffin would not result in the claimed invention.

Therefore, the rejection of claim 1, as amended herein, is respectfully traversed. Claims 2, 3 and 8 are dependant on claim 1 and, thus, are allowable over the prior art of record at least for reasons discussed above with respect to claim 1.

Claims 4-7 are jrected under 35 U.S.C. 103(a) as being unpatentable over Duffin in view of Mann (U.S. Patent No. 6,554,798). This rejection is also respectfully traversed, in view of the claims as amended herein.

More specifically, claims 4-7 are dependent (directly or indirectly) on claim 1. Accordingly, at least for reasons as noted above with respect to independent claim 1, it is submitted that dependent claims 4-7 are also patentably distinguished over the Duffin patent. Moreover, the Mann patent does not teach or suggest the above-noted “MD and CD telemetry systems controlled to employ a first preamble for messages sent from the communication device to the medical device and a second preamble for messages sent from the medical device to the

communication device” as claimed. Accordingly, the combination of the Duffin and Mann patents, as suggested by the Examiner, would not teach or suggest the presently claimed invention. Therefore, the rejection of dependent claims 4-7 is respectfully traversed, in view of independent claim 1 as amended herein.

Claims 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duffin in view of Lanzl et al. With regard to cancelled claim 12, this rejection is moot. Because claims 9-11 and 13-18 are dependent (directly or indirectly) on claim 1, those claims are patentably distinguished over the Duffin and Lanzl et al. patents, at least for reasons as described above with respect to independent claim 1. Accordingly, the rejection of dependent claims 9-11 and 13-18 is respectfully traversed, in view of independent claim 1 as amended herein.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duffin in view of Lanzl et al and further in view of Wernicke et al. This rejection is respectfully traversed, in view of the claims as amended.

Claim 19 is amended herein to be in independent form and to recite that the CD telemetry system is controlled to send messages from the communication device to the medical device using at least two different preambles, including an attention preamble for some messages and a standard preamble for other messages, the attention preamble comprising a preamble that captures and holds the attention of the MD telemetry system and as long as it continues to be received, and the standard preamble comprising a preamble that does not hold the attention of the MD telemetry system beyond a prescribed inbound listening period. This aspect of the invention is described in the present specification, for example, on pages 24 and 25. Neither Lanzl et al nor Wernicke et al. (alone or in the combination suggested by the Examiner) describe or suggest a medical system in which a CD telemetry system is controlled to send messages using two different preambles, as claimed.

Neither Lanzl et al. nor Wernicke et al. describe or suggest a CD telemetry system controlled to employ an attention preamble for some messages and a standard preamble for other messages sent from the communication device to the medical device, as claimed. Instead, at most, Wernicke et al. appears to refer to the use of a common password, handshake and parity

check scheme (Wernicke et al. patent, col. 7, ll. 5-6). Accordingly, it is respectfully submitted that claim 19, as amended, is patentably distinguished over the prior art of record.

Because claim 20, as amended herein, is dependent upon claim 19, it is submitted that claim 20 is patentably distinguished over the prior art of record at least for reasons as discussed above with regard to independent claim 19. The rejection of claims 19 and 20 is, therefore, respectfully traversed.

New claims 43-45 are added to further protect embodiments of the invention. Support for each of the new claims is found in the present specification, for example, on pages 24 and 25. Each of the new claims are dependent upon claim 1 and, thus, are believed to be allowable at least for reasons as discussed above with respect to claim 1. In addition, each of new claims 43-45 is believed to recite additional patentably distinguishing features.

For example, the prior art of record does not describe or suggest first and second preambles that each comprise a first bit pattern, where the first bit pattern in one of the first or second preambles (the first preamble) is repeated an extended number of times relative to the other of the first or second preambles (the second preamble), as recited in new claim 43 (and 44). Also, for similar reasons as discussed above with regard to amended claim 19, the prior art of record does not disclose or suggest a medical system having a CD telemetry system that is controlled to send messages from the communication device to the medical device using at least two different first preambles, including an attention preamble for some messages and a standard preamble for other messages, as recited in new claim 45.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check

being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

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